

AMENDMENTS TO THE CLAIMS

This Listing Of Claims will replace all prior versions, and listings, of the claims in the application.

Listing of the Claims:

Claim 1 (Original): An oxidic catalyst for the production of phthalic anhydride by oxidizing a hydrocarbon selected from the group consisting of o-xylene, naphthalene, and mixtures thereof, which catalyst comprises, based on the catalytically active composition, from 2 to 15% by weight (calculated as V2O5) of vanadium, from 1 to 15% by weight (calculated as SnO2) of tin, from 70 to 97% by weight (calculated as TiO2) of titanium oxide.

Claim 2 (Original): The catalyst of claim 1 which further contains, based on the catalytically active composition, up to 5% by weight (calculated as M2O) of at least one alkali metal.

Claim 3 (Original): The catalyst of claim 2 wherein the alkali metal is cesium.

Claim 4 (Original): The catalyst of claim 3 wherein the cesium is present in an amount of from 0.01 to 2% by weight (calculated as Cs2O), based on the catalytically active composition.

Claim 5 (Currently Amended): The catalyst of claim 1 ~~any of claims 1 to 4~~ wherein the tin is present in the oxidation state +IV.

Claim 6 (Currently Amended): The catalyst of claim 1 ~~any of claims 1 to 5~~ wherein the titanium oxide has a specific surface area of 10 to 30 m²/g, preferably 18 to 25 m²/g, and the anatase structure.

Claim 7 (Currently Amended): The catalyst of claim 1 ~~any of claims 1 to 6~~ wherein the catalytically active composition contains from 4 to 10% by weight (calculated as V₂O₅) of vanadium oxide, from 2 to 7% by weight (calculated as SnO₂) of tin oxide and from 0.1 to 0.8% by weight (calculated as Cs₂O) of cesium oxide.

Claim 8 (Currently Amended): The catalyst of claim 1 ~~any of claims 1 to 7~~ which further contains at least one element selected from the group consisting of lithium, potassium, rubidium, aluminium, zirconium, iron, nickel, cobalt, manganese, silver, copper, chromium, molybdenum, tungsten, iridium, tantalum, niobium, arsenic, antimony, cerium, phosphorus and mixtures thereof in an amount of up to 5% by weight, based on the catalytically active composition.

Claim 9 (Currently Amended): The catalyst of claim 1 ~~any of claims 1 to 8~~ wherein the catalytically active composition is coated on an inert support in an amount of 2 to 15% by weight, preferably 3 to 12% by weight, based on the total weight of the catalyst.

Claim 10 (Original): The catalyst of claim 9 wherein the inert support consists of pellets or granules of at least one material selected from the group

consisting of corundum, steatite, alumina, silicon carbide, silica, magnesium oxide, aluminium silicate and mixtures thereof.

Claim 11 (Currently Amended): A process for the manufacture of a catalyst according to claim 1 ~~any one of claims 1 to 10~~, comprising the steps of (i) mixing, in an aqueous or organic solvent, the ingredients of the catalytically active composition AND/OR precursors of said ingredients, to form a solution or suspension, (ii) coating said solution or suspension in the form of a thin layer on an inert support and drying or, if an unsupported catalyst is desired, evaporating the solvent of said solution or suspension and, optionally, drying and/or comminuting the solid residue and, (iii) subjecting the coated support or the solid residue obtained by evaporating the solution or suspension to a thermal treatment to form the definitive catalytically active composition.

Claim 12 (Original): The process of claim 11 wherein the ingredients and/or precursors of the catalytically active composition used to prepare the initial mixture comprise at least one vanadium compound selected from the group consisting of vanadium (v) oxide, ammonium metavanadate, vanadium chlorides, vanadium oxychloride, vanadium acetylacetonate and vanadium alkoxide, at least one tin compound selected from the group consisting of tin dioxide, METASTANNIC acid, orthostannic acid, tin oxyhydrates, tin chlorides and tin acetate.

Claim 13 (Currently Amended): The process of claim 11 ~~[[or 12]]~~ wherein the thermal treatment is conducted at 250 to 400 °C.

Claim 14 (Currently Amended): The process of claim 11 ~~any of claims 11 to 13~~ wherein the catalytically active composition is coated on an inert support in granular or pellet form by spraying the solution or suspension of the ingredients and/or precursors of the catalytically active composition onto said inert support and evaporating the solvent.

Claim 15 (Currently Amended): A process for the production of phthalic anhydride comprising the oxidation of a hydrocarbon selected from the group consisting of o-xylene, naphthalene and mixtures OF O-XYLENE and naphthalene in the gas phase at 340 to 400 °C with an oxygen- containing gas in a fixed-bed reactor in the presence of a catalyst according to claim 1 ~~any of claims 1 to 10~~.

Claim 16 (Original): The process of claim 15 wherein the initial concentration of the hydrocarbon in the gas phase is 0.5 to 2.0% by volume.

Claim 17 (Currently Amended): The process of claim 15 ~~[[or 16]]~~ wherein the gauge pressure at the entrance of the reactor is 0.35 to 0.55 bar.

Claim 18 (New): The catalyst of claim 4 wherein the tin is present in the oxidation state +IV.

Claim 19 (New): The catalyst of claim 5 wherein the titanium oxide has a specific surface area of 10 to 30 m²/g, preferably 18 to 25 m²/g, and the anatase structure.

Claim 20 (New): The catalyst of claim 6 wherein the catalytically active composition contains from 4 to 10% by weight (calculated as V2O5) of vanadium

oxide, from 2 to 7% by weight (calculated as SnO_2) of tin oxide and from 0.1 to 0.8% by weight (calculated as Cs_2O) of cesium oxide.

Claim 21 (New): The catalyst of claim 7 which further contains at least one element selected from the group consisting of lithium, potassium, rubidium, aluminium, zirconium, iron, nickel, cobalt, manganese, silver, copper, chromium, molybdenum, tungsten, iridium, tantalum, niobium, arsenic, antimony, cerium, phosphorus and mixtures thereof in an amount of up to 5% by weight, based on the catalytically active composition.

Claim 22 (New): The catalyst of claim 8 wherein the catalytically active composition is coated on an inert support in an amount of 2 to 15% by weight, preferably 3 to 12% by weight, based on the total weight of the catalyst.

Claim 23 (New): A process for the manufacture of a catalyst according to claim 10, comprising the steps of (i) mixing, in an aqueous or organic solvent, the ingredients of the catalytically active composition AND/OR precursors of said ingredients, to form a solution or suspension, (ii) coating said solution or suspension in the form of a thin layer on an inert support and drying or, if an unsupported catalyst is desired, evaporating the solvent of said solution or suspension and, optionally, drying and/or comminuting the solid residue and, (iii) subjecting the coated support or the solid residue obtained by evaporating the solution or suspension to a thermal treatment to form the definitive catalytically active composition.

Claim 24 (New): The process of claim 12 wherein the thermal treatment is conducted at 250 to 400 °C.

Claim 25 (New): The process of claim 13 wherein the catalytically active composition is coated on an inert support in granular or pellet form by spraying the solution or suspension of the ingredients and/or precursors of the catalytically active composition onto said inert support and evaporating the solvent.

Claim 26 (New): A process for the production of phthalic anhydride comprising the oxidation of a hydrocarbon selected from the group consisting of o-xylene, naphthalene and mixtures OF O-XYLENE and naphthalene in the gas phase at 340 to 400 °C with an oxygen- containing gas in a fixed-bed reactor in the presence of a catalyst according to claim 10.

Claim 27 (New): The process of claim 16 wherein the gauge pressure at the entrance of the reactor is 0.35 to 0.55 bar.